

A M
101
H6A5

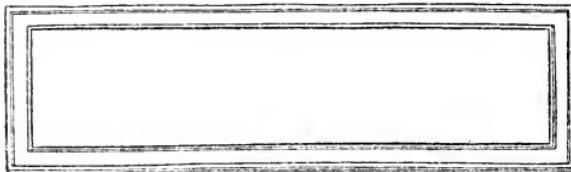
UC-NRLF



\$B 287 780

YB 23853

GIFT OF
PROF. G. A. KOFOID



London, County Council.

GUIDE FOR USE OF VISITORS

to

THE HORNIMAN MUSEUM Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation AND LIBRARY.

LONDON ROAD, FOREST HILL.

Six minutes from Forest-hill Station, L.B. & S.C. Railway, and
Four minutes from Lordship-lane Station, L.C. & S.E. Railways.

OPEN FREE

*Every day from 2 until 9 p.m., and on Bank Holidays from 10 a.m. to
9 p.m., except on Christmas Day, when it is closed.*

PRICE ONE PENNY.

<http://www.archive.org/details/guidetocollectio00hornrich>

Jas. TRUSCOTT & SON, LTD., Printers, Suffolk Lane, London, E.C.



London County Council.

A GUIDE

TO THE COLLECTIONS OF

THE HORNIMAN MUSEUM AND LIBRARY.

FOREST HILL, LONDON, S.E.

ILLUSTRATED BY PLANS.

1904.

ALL INFORMATION

AM101
H6A5

GIFT OF
PROF. C. A. KOFOID

HISTORICAL RECORDS AND BUILDINGS
COMMITTEE.

1903-4.

Chairman.

Frederick Dolman.

Vice-Chairman.

Capt. G. S. C. Swinton.

Chairman of the Council.

The Right Hon. The Lord Monkswell, J.P.

Vice-Chairman of the Council.

E. A. Cornwall, J.P.

Deputy-Chairman of the Council.

R. A. Robinson, J.P.

Bruce, W. W.	Leaf, W., D.Lit.
Burns, J., M.P.	Macdonald, J. R.
Gilbert, J. D.	Mullins, W. E.
Granville-Smith, R. W., J.P.	Radford, G. H.
Harben, H. A.	Straus, B. S.
Horniman, E. J.	Webb, Sidney.
Johnson, W. C.	

SUB-COMMITTEE FOR THE MUSEUM, LIBRARY, AND
GARDENS (1903).

Chairman.

W. C. Johnson.

Dolman, Frederick.	Macdonald, J. R.
Granville-Smith, R. W., J.P.	Mullins, W. E.
Horniman, E. J.	Swinton, Capt. G. S. C.

Committee Clerk.

W. W. Braines, B.A. (Lond.).

Officers of the Museum.

Alfred C. Haddon, M.A., Sc.D., F.R.S.	Advisory Curator.
Richard Quick	Resident Curator.
Frank Slade, F.Z.S.	Natural History Assistant.
A. W. Pepper	Librarian.

AMMOTILIAC

CONTENTS.

GENERAL PLAN AND ARRANGEMENT.

GUIDE TO THE COLLECTIONS.

SOUTH HALL.

Wall-cases.

- 1 - 10. Prehistoric archaeology.
- 11 - 26. Pottery.
- 27 - 29. Glass and enamel.
- 30 - 41. Carvings.
- 42 - 44. Metal work.
- 44A- 44D. Lamps.
- 45 - 47. Lacquered ware.
- 48 - 56. Arms and armour.
- 57 - 59. Religious buildings.
- 60 - 62. Metal-work.
- 62A- 62C. Lacquered ware.
- 63 - 77. Religious objects.
- 78 - 87. Musical instruments.
- 88 - 90. Bells.
- 91 - 106. Models of means of transport.
- 107. Chinese musical instruments.

Centre-cases.

- A. Modern Indian pottery.
- B. Oriental porcelain.
- C. Japanese enamelled vases.
- D. Phoenician glass.
- E. Oriental carvings.
- F. Japanese bronzes.
- G. Chinese house.
- H. Oriental arms.
- I. Spanish torture-chair.
- J. Japanese religious figures.
- K. Tobacco pipes.
- L. Oriental shrines.
- M. Drums.
- N. Scaldinos (braziers).
- O. Oriental shrines.
- P. Japanese temple shrine.
- Q. Orchestral organ.

—
M186285

Table-cases.

1. Casts of Stone Age carvings.
2. Romano-British and Anglo-Saxon archaeology.
3. Ivory carvings.
4. Glass.
5. Knives.
6. Instruments of torture.
7. Tobacco pipes.
8. Tobacco pipes.
9. Snuff boxes.
10. Model of railway locomotive.
11. Religious objects.
12. Chinese bell.
13. Musical instruments.

SOUTH CORRIDOR.

Porcelain.

ETHNOGRAPHICAL ROOM.

Wall-cases.

South—Models of heads; West Africa.

West—South Africa; fly whisks; gourd vessels.

North—North America; Maldives; Malay Peninsula; New Zealand; New Guinea.

East—Bamboo tobacco pipes; Africa.

Centre-cases.

Models of boats; baskets; belts, etc.

Figure of Kali.

SOUTH GALLERY.

East.

Constables' staves; palm-leaf books; locks and keys; tools; fish-hooks; spoons; amulets and charms; spinning-wheels.

South.

Beadwork, shell and metal ornaments.

West.

Toys and games; tallies; trays; horse-furniture; combs; head-gear; footgear; fans.

Table-cases.

Jewellery; civic medals; models of the great diamonds.

FIGURE ROOM.

Wall-cases.

Oriental figures and costumes.

Table-cases.

Jewellery; personal ornaments; primitive currency and coins.

NORTH HALL.

EGYPTIAN COURT.

Wall-cases.

1-6. Egyptian antiquities. .

6A. Mallicolo mummy.

6B. Peruvian mummy.

Centre-cases.

A-H. Egyptian mummies.

NATURAL HISTORY.

Wall-cases.

9A-28. Mammals.

31A-49A. Birds.

52A-70A. Birds.

76B-79. Reptiles.

91-93. Fishes.

80-90. Insects.

North wall. Survey of the Animal Kingdom.

East wall. History of Animals.

Centre-cases.

A. Lion.

B. Deer, Rocky Mountain sheep and goat.

C. Moose or elk.

D. Reindeer.

E. Walrus.

F. Polar bear.

G. Rhea.

H. Birds.

I. Birds.

Table-cases.

1. Birds' eggs.

2. Birds' eggs.

3. Insects.

4. Mud-fishes and amphibians.

NORTH CORRIDOR.

Vivaria, fresh-water and marine aquaria.

NORTH GALLERY.

Model of the clock in Strasburg Cathedral.

East.

Protozoa; sponges; corals; molluscs.

South.

Molluscs; crustaceans.

West.

Minerals.

INSECT ROOM.

Cabinet.

No. 1-2. Coleoptera, beetles.

3. Lepidoptera, British butterflies and moths.

4-8. Lepidoptera (Rhopalocera), butterflies.

9-10. Lepidoptera (Heterocera), moths.

11. British birds' eggs.

THE LIBRARY.

Dictionaries, encyclopædias, bibliographies and similar books of reference, and works on—

Physics and chemistry.

Mineralogy.

Geology and physical geography.

Travel and exploration.

General biology.

Botany.

Zoology.

Anthropology.

REFRESHMENT ROOM.

(In the South Gallery.)

THE GARDENS.

THE HORNIMAN MUSEUM.

Founded, in 1890, by Frederick John Horniman, Esq., M.P., F.R.G.S., F.L.S.; rebuilt in 1900; and, in 1901, presented by him, with the adjoining Horniman-gardens, to the London County Council, as a Free Gift to the People, for ever.

GENERAL PLAN AND ARRANGEMENT OF THE MUSEUM.

The building consists of two large galleried halls at different levels (necessitated by the sloping nature of the ground on which the Museum is built), with a corridor extending the entire length of the building, communicating with each hall, and having above it the Caretaker's Apartments, the Refreshment Room, the Resident Curator's Rooms, the Library, the Natural History Assistant's Room, and the Students' Insect Room. The entire building is 258 feet long by 61 feet wide, with a clock tower nearly 100 feet high. The total area is 16,485 feet, and the cost of erection was about £40,000. Mr. C. Harrison Townsend, F.R.I.B.A, was the architect.

The Mosaic Panel on the front of Museum was designed by R. Anning Bell, and executed by G. Bridge. The subject is an allegory of the course of human life. The central figure typifies Humanity in the House of Circumstance, the wall indicates the limitations of human nature generally, and terminates at one end in the Gate of Life and at the other in that of Death; these lead respectively out of and into a land of fruits and flowering trees, symbols of the things we believe in or hope for, but which are beyond our exact knowledge. By the side of Humanity stand figures symbolizing Fine Arts, Poetry and Music; Endurance, an armed figure, holds a shield and sword, with which to equip Humanity when the kneeling figures, Love and Hope, have clothed him with their qualities. Near by are Charity, bearing figs and wine, white-haired but virile Wisdom, Meditation, in her sad-hued garments, and finally Resignation, with sombre look, resting on his staff, stands immediately in front of the Gates of Death.

Beneath is a bronze tablet, designed by F. W. Pomeroy, recording the gift of the Museum to the London County Council.

The bronze drinking fountain was given by Mr. Emslie J. Horniman.

In the Entrance Hall will be first seen a bronze bust of Mr. F. J. Horniman, the donor of the Museum, by J. W. Rollins.

The (Lower or) South Hall, measuring 100 feet by 47 feet, with a gallery 12 feet wide, is devoted to Archaeology and Ethnology. Connected with it are the Oriental Figure Room and an Ethnographical Room.

The (Upper or) North Hall, of the same proportions as the South Hall, and with a similar gallery, contains (with the exception of the Egyptian Court) the Natural History Collections. There is also a special Insect Room for students.

The collection of living animals is in the corridor, and may be reached readily from either the South or North Hall.

The Library, entered from the east gallery of the North Hall, contains works on subjects related to the Museum Collections, and is available to all visitors. (See page 40 for a more detailed description.)

Refreshments can be obtained in a room entered from the east gallery of the South Hall.

NOTICE AS TO RE-ARRANGEMENT OF THE COLLECTIONS.

Owing to the extensive alterations now being made in the arrangement of the collections, this Guide no longer accurately represents the disposition of the specimens.

SOUTH HALL.

The exhibits are being arranged in sections, which will extend from one side of the hall to the other. Beginning at the entrance to the Museum, these sections are as follows:—

1. Weapons, armour, hunting and fishing appliances.
2. Examples of the decorative art of savage, barbaric and civilised peoples.
3. Pottery, basketry, weaving, and other specimens illustrating the domestic arts.
4. Religious objects.
5. Musical instruments.
5. Means of transport by land and water.

The specimens illustrating prehistoric archaeology (formerly in cases 1-10) are now being arranged in the new balcony cases. The tobacco-pipes and snuff-boxes (centre case K and table cases 7, 8 and 9) will be removed to the south wall-cases in the balcony.

The Ethnographical Room is closed for the present.

In the south balcony the contents of the wall-cases will be re-arranged, but the present grouping of the specimens will be retained in the main.

NORTH HALL.

There has been a large addition of specimens by the removal of the Prout Newcombe Collection from the Shoreditch Technical Institute to this Museum. These will be gradually incorporated with the rest of the collection.

The positions of the centre cases have been altered, and the insects formerly shown in cases 80-90 have been removed to the Insect Room.

The wall cases of the north balcony are being arranged to illustrate the structure and life-history of animals belonging to the chief animal groups.



GUIDE TO THE COLLECTIONS IN THE MUSEUM.

SOUTH HALL.

The cases in each Hall are numbered consecutively from No. 1 at the left hand on entering.

In the first wall-case are specimens of the hafting of modern stone implements, showing some of the ways in which stone weapons were probably mounted by prehistoric man.

The large carved archway is from Jeypore, India. The upper frieze represents the entrance to a Hindu temple, and the panels are finely carved in high relief. To the right of it is a facsimile of the Coronation chair in Westminster Abbey.

Prehistoric Archæology. (Greek *archaiologia*, "anti-^{Cases 1-10.}arian lore," from *archaios*, ancient, *logia*, discourse.)—The earliest evidences of human handiwork are stone implements. The oldest of these date back to many thousand years before our era. The *Stone Age* comprises the Eolithie (Dawn of the Stone Age), the Palæolithie (Old Stone Age of roughly chipped implements), and the Neolithie (New Stone Age of finely chipped and polished implements) Periods. The specimens are from various localities, and include a collection of Neolithic implements from Denmark, one of stone implements used by the Caribs and other aboriginal inhabitants of the West Indies, and a collection of casts of stone implements (mostly American), received from the National Museum, Washington.

In the long table-case is a collection of casts of Table-case 1. wings on bones and antlers from French caves, and a few specimens of bones and teeth from Devonshire caves.

The Bronze Age.—In course of time copper implements replaced those of stone, subsequently bronze superseded copper, and still later iron replaced bronze. The Bronze Age is represented by a bronze

Cases 9-10.

dagger from Ireland, various bronze axe-heads (one found at New-cross), and other specimens. Ancient horn and bone implements of uncertain age, found in the river Thames.

Table-case 2. **Romano-British Archæology.**— Implements, utensils, knives, keys, scales. Personal ornaments, fibulæ (brooches), and rings.

Anglo-Saxon Archæology.— Implements and utensils.

Cases 11—13. **Pottery.**—Ancient British and Romano-British urns, amphoræ, and other vessels, mostly found in London, of dates from A.D. 43 to 410—the 367 years of the Roman occupation of Britain. Cyprian vessels, mostly from Paphos, and more than 2,000 years old; Phœnician vessels from Malta; Greek vases, etc., and urns from Alexandria. Vessels from ancient Peruvian tombs (mostly at Cuzco). Mexican antiquities.

Cases 20—22. Two series of specimens illustrate the way in which gourds have been copied in pottery. Modern Chinese and Japanese pottery. Indian, Malayan, Moorish, and African pottery. Persian and Indian wall tiles. Above cases 11—16 Burmese tablets, from Pegu, 15th century. Modern Indian and Sinhalese pottery. Chinese and Japanese porcelain vases, dishes, rice bowls, etc.

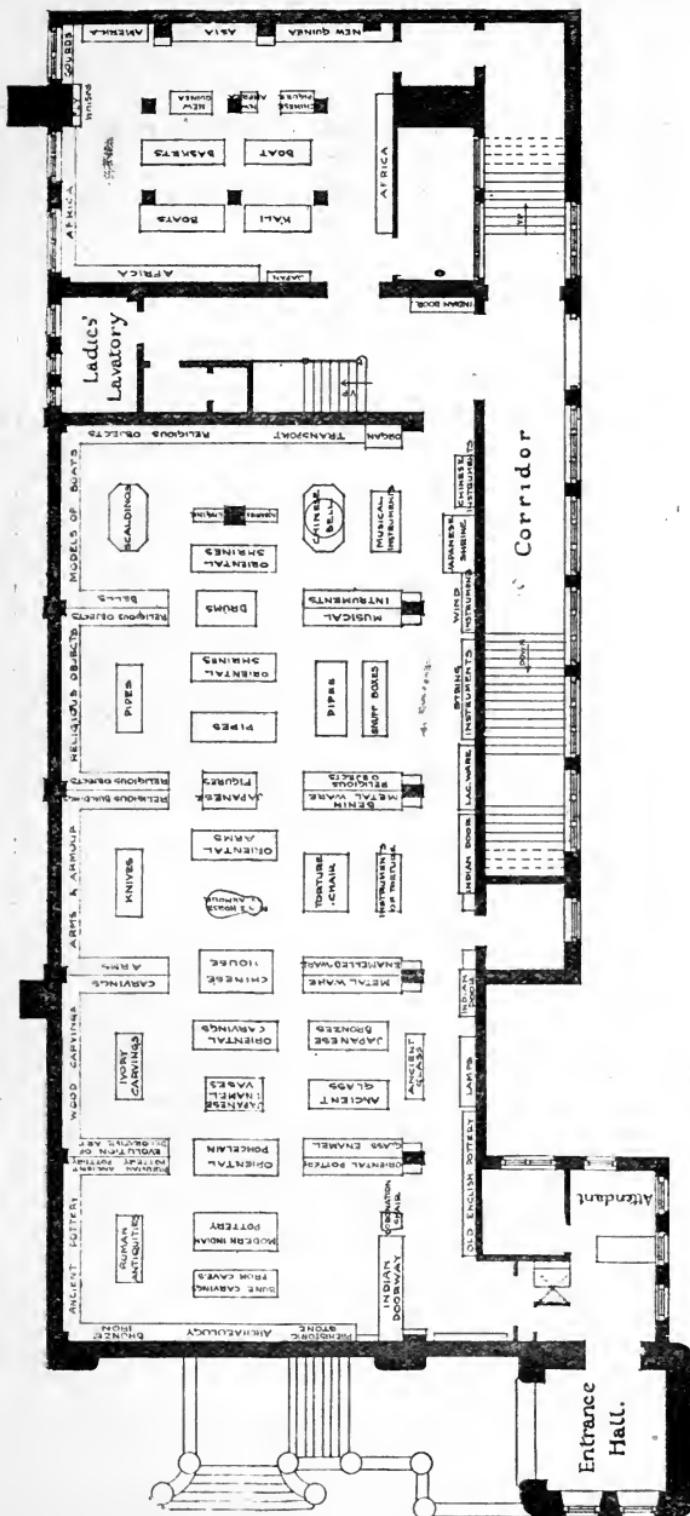
Centre-case A. Mediaeval and old English pottery. Green-glazed ware. Grey-beards or bellarmines. Watering pots. Pipkins. Tygs or drinking mugs. Ointment pots. Candlesticks. Bottles carried by pilgrims. Nearly all of these examples are from excavations made in London.

Centre-case B. Cases 23—26. **Pewter, horn, leather and wooden vessels.**—Leather “Jacks” or ale jugs, cups, harvest barrels, etc.

Table-case 4. **Glass.**—Roman glass bottles found in London. English wine bottles, some with dated seals (1723, etc.). Modern Venetian, German, English and Oriental glass. The adjoining table-case contains fragments of ancient glass.

Centre-case D. Phœnician glass, found in tombs at Mount Carmel and Tyre.

Case 29. **Enamels.**—Encaustic tiles (the forerunners of Champlevée enamel). A small series of vases showing



Centre-case C. the process of Japanese cloisonné enamel (made expressly for the Museum). A reproduction of the Alfred jewel now preserved in the Ashmolean Museum at Oxford; and a few specimens exhibiting translucent enamelling. Two large Japanese cloisonné enamel vases from Nagoya, each 5 ft. in height by 7 ft. 6 in. in circumference, which, it is stated, took four years to complete.

Cases 30—32. **Evolution of Designs.**—Specimens to illustrate the evolution of designs and patterns. Generally these are found to be conventionalised and often degraded copies of natural objects.

Cases 33—36. **Carvings.**—Scandinavian wooden tankards, beer bowls, Norwegian hand-mangles or ironing-boards, salt boxes, etc. Ivory carvings from China, Japan, and carvings in ivory and wood from the City of Benin, West Africa. An inlaid mirror in a folding frame from Hoshiarpur, India. An elaborately carved stand from Burma. Alabaster and soap-stone carvings from Agra, India (windows, screens, plates, boxes, paperweights, etc.). A large Japanese wooden inlaid tray, representing a stork in her fir-tree nest feeding her young. A piece of Burmese work, carved from a single piece of teak, representing two men fighting with daggers. Two small seated figures of Japanese boys.

An old German carved oak figure of the Madonna and Child, and other figures of a mother with her child, illustrate similar ideas in various religions. Beneath are subjects from the life of Christ, carved in wood.

Two old Indian carved teak doors from Ahmadabad, India, are fixed to the walls under the east gallery.

Centre-case G. Model of a Chinese house with three courts, still standing in the city of Chung-King, Western China.

Cases 42—44. **Metal Work** from China, Japan, India and Ceylon. Copper, tin and brass ware, including "lotas," bowls, figures, etc. Tin-ware of different forms, made by Chinese, from the Straits Settlements. Japanese bronzes, vases, water-bowls, "koros" or incense burners, etc. Bidriware, in silver on pewter, from Bidar, a town in Hyderabad, India.

Centre-case F. Cases 60 - 62. Castings in bronze and brass from Benin in West

Case 47.

Cases 60 - 62.

Africa, consisting of panels in high relief, representing warriors, chiefs, etc., used to decorate the door-posts of the king's house; brass pendants, keys, figures, birds, etc. The remainder of the Benin objects, comprising carvings in ivory and wood, will be found in case 38.

A torture-chair, taken from the dungeons of the Spanish Inquisition at Cuenca. It is inscribed and dated ("Santo Oficio Caballero, ano de 1676").

Centre-case I.
Table-case 6.

Other examples of metal-work (in addition to those described here) are in the gallery.

Lamps and heating - appliances from different countries. Lamps, lanterns, rush - holders, nips, snuffers, etc. Scaldinos, braziers, and other objects used for warming the hands and feet in various parts of the world. English warming - pans are in the eastern gallery.

Arms and armour.—Swords, rapiers, cutlasses and daggers of various periods. A two-handed sword (dated 1534, German). Helmets, including a 16th century morion, a burgonet of Cromwell's time, and tilting "basnets" or steel caps provided with visors. A Norse "byrnies" or chain-mail shirt (every link of which is separately riveted). Pieces of horse-mail.

In the centre of the hall is a mounted figure of a knight, both horse and man being clad in a reproduction of 16th century German fluted plate-mail. There are also four figures in cap-a-pie armour.

European guns, muskets, flint-lock pistols, etc. Old cannon (one dredged up at Spithead). Old cross-bows and revolvers.

Oriental arms. — Indian and Japanese guns. Cases 51—54. Mahratta and Sikh weapons. An old shirt of linked mail with head and arm defences. Indian bows, arrows and spears. Indian swords and daggers. A Circassian dagger formerly belonging to Baker Pasha. Malay and Javanese waved "krises." Javanese and Chinese swords and daggers. Burmese "dahs" or swords.

Lacquered-ware.—Indian ware in red and blue lac from Jeypore, and black lac from Moradabad. Indian and Burmese lacquered-ware. Brackets, boxes, dish

and hat stands. Vases, of carved wood, lacquered gold and inlaid with coloured glass, etc.

Religious Objects, illustrating the images, furniture, shrines, rosaries and other accessories of various religions.

Cases 57—59.

Models of **Buildings used for religious purposes** in India, Burma, China and Japan. Model in alabaster of the Taj-Mahal at Agra, India, a mausoleum built (1630-47) for his wife by the Shah Jehan.

Table-case 11.
Centre-case E.

I.—*Christianity*, represented by crucifixes, Madonnas, shrines and rosaries.

II.—*Brahmanism*, or *Hinduism*.—The great gods, Deva, the Shining Ones, are represented by figures of Brahma (Creator of the Universe), Vishnu (the Preserving Power of Nature), and Siva (the Destructive Force of Nature, and Reproductive Power), these three forming the Hindu Tri-murti, or Triple Form. Associated with these are Saraswati (Consort of Brahma), Lakshmi (Consort of Vishnu), goddess of Wealth, and Parvati (Consort of Siva) who is also known as Kali (goddess of Terror and Destruction).

Among the lesser gods, or godlings, Devata or Deota, are Surya (the Sun god), Ganesa (the elephant-headed god of Wisdom), son of Parvati, Hanuman (the Monkey god, who scares away evil spirits and is the giver of offspring), Krishna (a deified national hero), and Kama (god of Love). These and a multitude of other godlings belong properly to the religion of the aboriginal inhabitants of India.

In a Centre-case in the Ethnographical room is a papier-maché figure of Kali standing on the prostrate form of her husband Siva. This figure came from Calcutta, which takes its name from the goddess (Kali-ghat or Gate of Kali).

Case 63.

A panel of carved teak from the Juggernaut car, representing the god Vishnu, the most popular Hindu god, riding on a crocodile. A carved figure of Vishnu in black stone and one of Lakshmi in marble, from Jeypore. An ancient carved marble figure of Durga or Kali trampling on and slaying the demon bull "Mahishasura," the myth being allegorised as the

Case 64.

triumph of virtue over vice. At the back of the case ^{case 65.} are the figures of two gods, Hanuman and Ganesa, in red sandstone.

A figure of the god Chanraigee, a form of Brahma, made of copper plated with gold, and originally brought from Tibet.

A Hindu shrine representing Ganesa, the canopy of ^{Centre-case 0.} which is painted with Hindu mythological figures.

III. — *Buddhism.* — Buddhism was founded by ^{Cases 66—67.} Gautama, an Indian prince, as a reaction against the polytheism and ritual of Brahmanism. He advocated a life of contemplation and abstinence, and abolished idolatry and sacrifices. Images of Buddha in his three characteristic attitudes—(1) as standing preaching, (2) as sitting on the lotus plant under the Bod-tree (*Ficus religiosa*), (3) as reclining on a couch, when he entered into Nirvana. Three Japanese shrines, two of them with Buddha, and one elaborately carved and gilt, with Kwannon, the goddess of Mercy. Figures of ^{Cases 66—68.} Buddha, in marble, stone, wood, bronze, etc., from Tibet, India, Ceylon, Burma, Siam, China and Japan. Two large Japanese Rakans or Buddhist saints, each with a nimbus or halo. A large Burmese Buddha ^{Cases 69—70.} (marble), in a sitting posture, with a curious smile on the face, a mode of representation which is ^{Case 71.} unusual. A carved figure of "Neminatha," from Mandilapura, India, executed by the Jains, and over ^{Cases 73—74.} 700 years old. Burmese and other Buddhas. Chinese carved wood and soapstone images. A large marble ^{Case 76.} Buddha from Myingyan, in Upper Burma. A Japanese carved and gilded shrine of Kwannon. Small figures of seated Buddhas from various parts, images from Korea, and Buddhist ceremonial fans from Ceylon.

A life-size Japanese carved-wood figure of a Rakan, ^{Centre-case L} represented as miraculously causing a dragon to arise from his gourd. A large Japanese Buddha, seated on a lotus. A Burmese temple-box or chest for holding religious objects. Two large Burmese Buddhist figures of carved wood, gilt, brought from a temple after the Burmese War of 1824, and a large

Centre-case P. carved and gilt Burmese shrine, having Buddha standing in the centre, with Buddhist priests on either side. At the back a temple banner from Tibet. A large Japanese Buddhist shrine, carved and gilded, from Nikko.

Centre-case J. Japanese religious figures in porcelain. Yebis (god of Daily Food) with the "tai" fish (the sea-bream), Hotei (god of Contentment) with bag, Daikoku (god of Riches) with hammer, Kwannon, and Rakans.

Centre-case L. An elaborately carved and gilt Japanese wood screen, by the celebrated Japanese artist Masatoshi, representing the life and adventures of Shinran, a Buddhist priest who lived in the thirteenth century.

Case 98. A Chinese table from Ningpo, on which is placed the household shrine, with an image of the god of literature, candlesticks, joss-sticks and incense-burners.

Case 99. IV.—*Various religions.*—Ceremonial masks from New Guinea, New Ireland and Benin. A large carved wooden figure representing the ancestress of the people of Orokolo, Gulf of Papua, British New Guinea. Sinhalese devil-dancers' masks. Masks worn by priests in demon-worship at Darjeeling.

V.—*Magic.*—Amulets and charms of various kinds are placed in the east gallery.

Centre-case K. Tobacco pipes, ranging from prehistoric (the mound pipes of Ohio) and ancient forms to the modern clay. Casts of the North American Indian mound pipes. Specimens of the Calumet or North American pipe, which was sometimes combined with the tomahawk. Slate pipes from Vancouver Island. Eskimo pipes. Dinka pipes from Central Africa. Damara pipes from the West Coast of Africa. Ashanti clay pipes. Kaffir pipes in wood, stone and horn. Wooden pipes from Algiers and Tangier. The straight small-bowl pipe. Japanese bamboo pipes. Pipes from Java. Shin wooden pipes (smoked by the women only), silver pipes used by chiefs of the Shan States, an Arakanese gourd-pipe and other Burmese pipes. Indian Narghaels or water-pipes (of coconut, metal, glass, bidri-ware, etc.). Turkish hookahs and Arab chibooks. Chinese pipes for smoking through water.

Carved German and Austrian meerschaum pipes. Table-case 7. German porcelain and horn pipes. Venetian-glass pipes. Old English clays. Dutch cigar holders. Table-case 3. Old English pipe stoppers.

Chinese opium pipes and appliances.

Snuff-boxes and snuff-bottles from various localities. Table-case 9.

Musical instruments, classed as string, wind, percussion.

String instruments:—*Hand - controlled* — French, Cases 78—87. German, and Irish harps. Dital harps (an improved form of harp-lute) by E. Light, 1816. Two German psalteries, 16th century. A bell-harp made in Bath, about 1700. A German cordophone. Mandoline by G. Battista, 1795. Cithern. Pandora. Guitar. Lyre-guitar by G. Battista, Naples, 1815. Lyre-guitar by I. Schweiger, Lisbon. Harp-guitar by Levien, 1820. Indian Sitars.

Struck.—Italian dulcimer, 1757. English - keyed cithern. Burmese “megoum” or crocodile - harp. Japanese “koto” or dulcimer.

Bowed.—Violin by J. Crouck, London, 1682. Violin Cases 81—84. by Charles and T. Thompson, London, 1775. A German viola by J. Michael Simon, Brittenwald, 1793. A viol d'amor by F. Chateaureynard. Violin by J. Ward, Dublin, 1764. A pochette or kit-violin. A Servian violin. A viola-da-Gamba by Joachim Tielke, Hamburg, 1602. An Italian vielle or “hurdy-gurdy.”

Wind instruments:—*Lip-blown Flutes*—Egyptian Case 84A. and Hungarian flutes. A “mogonda” or Indian snake-charmers’ flute. A primitive mouth-organ from Case 62A. Borneo. A Chinese “cheng” or mouth-organ. An oboe. A cor anglais. Bassoons. A German “serpent,” formerly used in orchestras and military bands. Ophicleide. Bugle.

With air reservoir.—Normandy and Italian bagpipes. Irish union bagpipes. Indian horns. Trumpets from Tibet. A French melophon by Leclere, Paris, 1837, containing a bellows set in motion by a handle.

Percussion instruments:—*Vibrating membranes*—Case 81A. Tambourines from Spain and elsewhere. An English

military tambourine, formerly used by the 4th Queen's Own Light Dragoons, now the 4th Hussars.

Drums from Tibet made from human skulls.

Table-case 13.

Centre-case M.

A Dahomey drum, ornamented with two human skulls, with a human shin bone for a beater. An Ashantee drum, decorated with a number of human lower jaws. Tom-toms from India.

Automatic instruments, instruments of any of the above classes played by machinery; the orchestral organ is an example.

Bells.—Small Roman bells. A 6th century Celtic bell, found at Bosbury. Three mediaeval alarm-bells, from Northamptonshire. Two Italian 16th century hand-bells, and a small model of the great bell of Moscow. Hand-bells used in the temples by the priests, in Tibet, Ceylon, India, etc. A Chinese temple-bell, 2 ft. 3 in. in height and 1 ft. 10 in. in diameter, made of meteoric iron and silver, formerly hanging in a Buddhist temple at Kuhlan, a town on the Island of Tylo. A Japanese bronze temple-bell, 2 ft. 9 in. in height, ornamented with a circle of raised balls or knobs, and two Burmese temple-bells, with elaborate loop-handles for their suspension. Cattle-, sheep-, mule-, camel- and other bells from various parts of the world, including a cow-bell, of wood, from Java. Fetish-bells from the Congo and Benin, the latter having been used to announce human sacrifices.

Centre-case O.

A large Japanese bronze temple-bell, hung in a wooden lacquered stand. A Burmese wooden model of an elephant, 3 ft. high, supporting on its back an elaborately carved screen, in which a gong is hung. An old Burmese gong on a stand, taken from the palace of the ex-king Thebaw.

Case 105.

Stand 12.

A large Chinese iron temple-bell, covered with Chinese characters (formerly gilt), with a dragon loop for suspension.

Cases 91—97.

Models of Means of Transport.—*Water-transport*.—An early Egyptian boat (model from a tomb). A Viking ship, with sail and oars. A Welsh coracle and an Irish corragh. Burmese boats. A fully-rigged ship and boats from the Sulu Archipelago. Kata-

North wall.

Cases 88—90.

Centre-case O.

marans and rice boats from Ceylon. A passenger and luggage boat from Java. A New Zealand war-canoe with carved bow and stern; beside it is the bow or prow of a full-size canoe, also ornamented with spiral carving. Canoes from Vancouver. Canadian birch-bark canoes. A native model of a Greenland Eskimo in his kayak, with his double-bladed paddle, spear, and harpoon with inflated bladder to mark the course of the whale or seal when harpooned. Above are two full-size canoes. One, from the north-west coast of America, brought home by Captain Cook in 1770, is 7 ft. 6 in. long. The other is from Savo, in the Solomon Islands, and is 10 ft. long. Above Case 102, a full-size canoe, with paddles and outrigger, from the South Pacific Islands, 23 ft. long.

Models of trading boats from India, the Maldive Islands, and Persia, and other models of boats in the Ethnographical Room.

Land-transport — Models of Indian native carts. Case 99—106.
Bullock-carts. Elephants carrying howdahs. Camels with saddles. Indian palanquins. Japanese jinrikishaws. Chinese barrow with one wheel.

An English Sedan chair is placed in the Corridor, and a primitive Scandinavian sleigh.

ETHNOGRAPHICAL ROOM.

The Ethnographical Room contains the remainder of the ethnological exhibits. Beginning on the left, the wall-cases contain: Bamboo knives and head-carriers from British New Guinea. Japanese models of human heads, depicting various facial expressions. Clubs, spears, bows, arrows, paddles, bowls and baskets, used by native tribes of West Africa.

In the wall-cases by the windows, African wooden stools (one an Ashantee chief's seat of honour). Specimens of weaving, from Mandingoland, West Africa. Fly-whisks or chowries, with handles and brushes of ivory or sandal-wood, yaks' tails, etc., from India. Gourds from various parts, used to carry water, lime, etc.

In the next large wall-case, North American Indian work. An Indian chief's dress complete. Saddle.

Tomahawk. Clubs. Bows and arrows, etc. On the wall are Canadian snow-shoes of different shapes.

The next cases contain various domestic appliances from the Maldivian Islands. Malay fishing apparatus, and models of native houses. Cloaks from New Zealand. Weapons of various kinds from New Zealand, New Guinea and Fiji. A Fijian "idol-house" made of coconut fibre.

The eastern wall-case contains Zulu beaded skirts, grass loin-cloths, and wearing-mats from the Cameroons, clubs, and other objects.

A small case contains several Papuan bamboo tobacco-pipes. In another case are carved wooden belts and drums from New Guinea.

A centre case contains baskets collected from various parts of the world. Below, a full-sized reindeer sledge, "kjerris," from Lapland.

In another case, a large Chinese group, carved from the roots of trees, and in a small case, carvings from Queen Charlotte's Island, British Columbia. On the pillars are spears and clubs from various parts, and blowpipes (sumpitans), used with poisoned darts, from Borneo. The centre case containing a figure of Kali has been referred to on p. 14.

CENTRAL CORRIDOR.

On the walls of the corridor are Græco-Roman mosaics, one bearing a Coptic Greek dedication from Mark Antony to Queen Cleopatra.

Over the door, **coats-of-arms**, carved and heraldically coloured. The largest is the coat, with crest and supporters, of the family of Berens, another that of the Duke of Clarence (afterwards William IV.), presented by him to the principal bookseller in Falmouth.

SOUTH CORRIDOR.

Porcelain.—In a case in the South Corridor will be found a collection of English and European porcelain including specimens of Crown Derby, Worcester, Wedgwood, Lowestoft, Caughley, Coalport, Minton, Spode, Rockingham, and other ware. Foreign porcelain is represented by Sèvres, Dresden, Fürstenberg,

Berlin, Vienna, Capo-di-Monte, Copenhagen, St. Petersburg, etc.

CENTRAL STAIRCASE.

On the landing, a carved screen from Jeypore, and a Chinese painting on silk.

On reaching the top, turn to the right to enter the gallery.

SOUTH GALLERY.

Police-batons, many of them used against the ~~East~~ ^{Irish} Fenians and Chartist. Tipstaves. Police-rattles. Handcuffs.

Pig-scrappers (now nearly obsolete). Old **Sussex-iron** castings (Firebacks, firedogs, etc.). Old English **domestic utensils**. Iron-spits. Trivets. Knife-boxes. Brass and copper warming-pans. A teazle-frame from Yorkshire.

Palm-leaf books, with the stiles used in scratching the characters, from Burma and Ceylon. Tibetan engraved **wooden prayer-blocks**, with prints from them. Chinese wood-blocks and school-books.

Locks (including padlocks) and **keys**.

Carpenters' tools and agricultural implements, old English, Chinese and Sinhalese.

Man and animal **traps**. Spring alarm-guns formerly used in plantations.

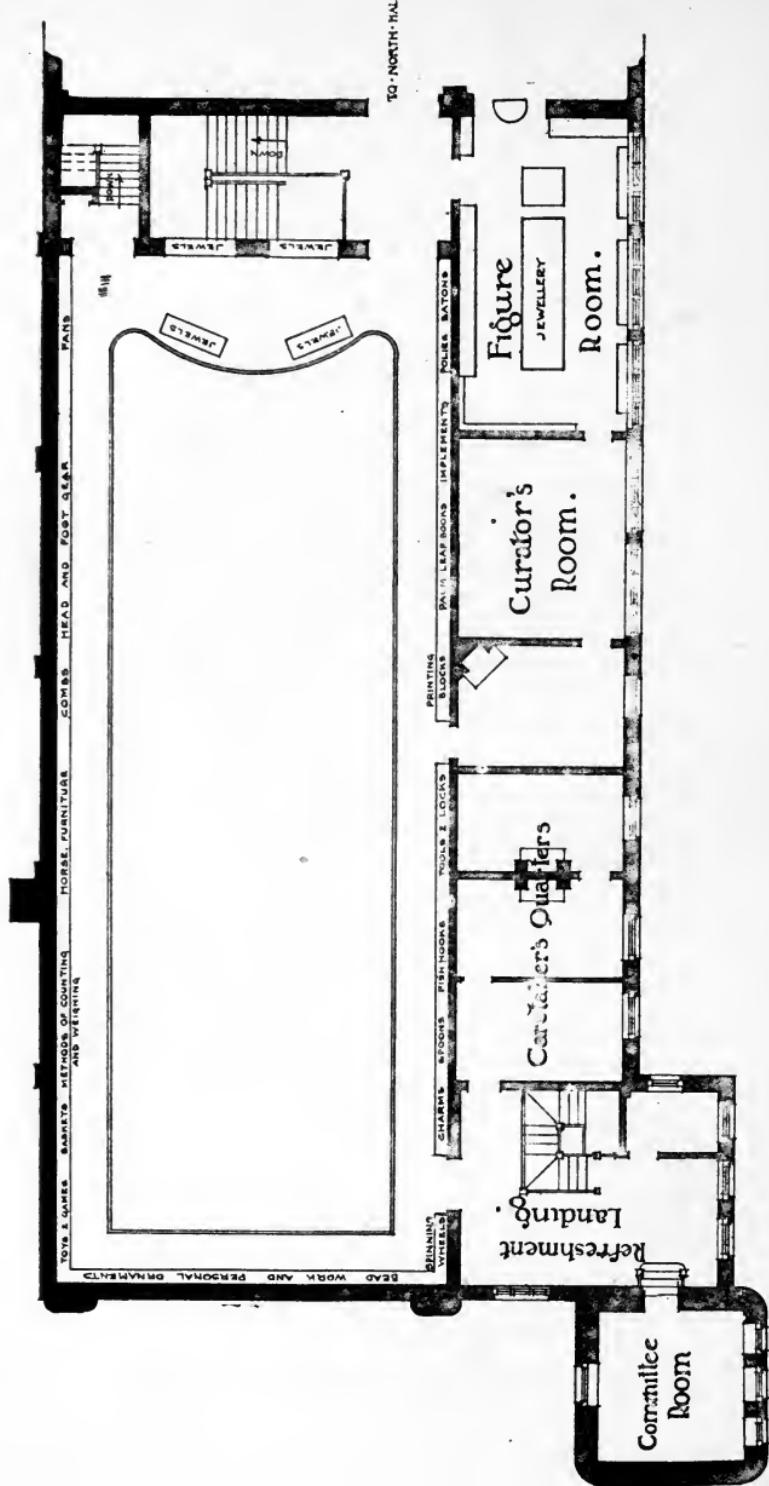
A series of **fish-hooks**, net-floats, etc., from various countries.

Spoons from all countries, the most primitive being those from Oceania, some made out of coconuts, others out of scallop shells. Chinese **chopsticks**.

Betel-nut cutters, pounders, spatulas or spoons, used to convey to the mouth the lime chewed with the *betel* (Areca) nut, etc. The custom of betel-chewing is practised largely by the natives of India, the Malay Archipelago, and parts of New Guinea, etc.

Chinese **kitchen utensils** and Burmese bamboo utensils.

Old English mortars and pestles, wooden platters, pewter plates and dishes, etc.



Magic.—Amulets and charms from China, Tibet, Africa, etc.

Spinning wheels. Bobbin wheels. Model of a weaving machine. Lace pillow-bobbins and pins used in making Honiton lace. Spindles. A distaff from Ragusa, in Dalmatia.

Bead and shell work from Africa, North and South ^{South side} America, and several parts of Oceania. Metal ornaments from Africa.

Toys and games from various countries, all of ^{West side.} native manufacture. Marionettes and dolls from Burma. Indian lacquered toys. Burmese model toy-carts. Stone spinning tops from Murray Island, Torres Straits. Ancient terra-cotta toys from Cyprus. Battledores from Japan and Mandingoland, West Africa. Chinese chessmen. Chinese and old English draughtsmen. Dice-boxes. Old English cribbage-boxes. Game boards for playing "Olinda Pura," or "Mancala," from Ceylon. Children's rattles. Chinese and Japanese playing cards.

Old spectacles. Razors. Nutcrackers.

Steelyards. Scales. Hop-pickers' and bakers' tallies.

Trays.—Copper and brass trays from India and Ceylon. Copper trays with silver incrustations from Jeypore, India.

Ancient and modern **Horse-furniture.**—Bridles. Bits. Stirrups. Spurs. Horse-shoes of various types, including Roman examples found in London. Dogs' collars, one made of brass, inscribed I.F. von W., and dated 1778. A wolf-dog's spiked-collar.

Combs (including one formerly belonging to Queen Elizabeth) and **Hand-mirrors.**

Head-and-Foot gear.—Indian and Chinese hats. Boots. Shoes. Sandals. Moccasins.

Fans.—Old English, French, Chinese, African and other specimens.

In the corner are wall fire-insurance plates, Chinese and Japanese **fire-pumps**, and an old English fire-extinguisher.

Jewellery.—Necklets, ear-rings, bangles and anklets ^{North side.} from India and Ceylon. Chinese jewellery. Gold

necklets from Burma. Facsimiles of famous great diamonds, with labels giving the history and weight of the originals.

Civic medals, with a description of each specimen. (A collection of Roman, British and foreign coins is in the Figure Room.)

Two large Japanese metal panels, showing birds in high relief.

FIGURE ROOM.

The Figure Room contains life-size and miniature **Models** representing various physical types and styles of **National costume**: A Greek lady in richly embroidered dress, with gold head ornaments, necklace, bracelets, etc. A Burmese court lady in a rich embroidered dress of gold on green velvet. A Nepalese with fur-lined and embroidered coat. A Kachin man and woman from Upper Burma, the former carrying a basket ornamented with brass beads and cowrie shells. A man from the Punjab in green silk. A priest in black satin from Tibet.

Costumes only.—A dress from Bikanir (India) ornamented with pieces of looking-glass. A man's dress from Central India with gilt and silvered spangles and beetle wings.

Papier-maché models of human heads, showing the different Hindu caste marks. Coloured clay models of figures from Lucknow, single and in groups, illustrating the different Hindu castes and occupations. Similar figures, in carved and coloured ivory and wood, from Rangoon.

Chinese inlaid iron-wood chairs, with marble seats and backs.

On the walls are a Chinese decorative banner carried before a bride, photographs of different Oriental races, native drawings, and a relief map of India.

Table-cases.

Indian Jewellery and personal ornaments.

Primitive Currency.—Shell-money from the West Pacific. Chinese hoe-and-knife-money.

Coins.—Roman, British (from the Conquest to the present time) and some foreign coins.

NORTH HALL.
THE EGYPTIAN COURT.

Egyptian antiquities.—A facsimile of the “Papyrus ^{South wall.} of Ani,” in the British Museum, containing many of the chapters of the Egyptian “Book of the Dead,” and coloured reproductions of funeral tablets.

The religion of the Ancient Egyptians was mainly concerned with the life after death, and the deities most frequently represented were Osiris, god of the Dead, and king of the nether-world; Isis, the Dawn-goddess, sister and wife of Osiris, and mother of Horus, the young Sun-god.

Ushabti figures or “Answerers” to the bidding of ^{Cases 1—6.} the departed, in clay, porcelain and wood; the god represented by these figures is Osiris—he carries a hoe, pickaxe, and basket. Egyptian divinities in bronze and porcelain. Wooden mummy masks. Mummy cat, ibis, hawk and small crocodiles, and a mummy crocodile of about the XIIth Dynasty, B.C. 2400.

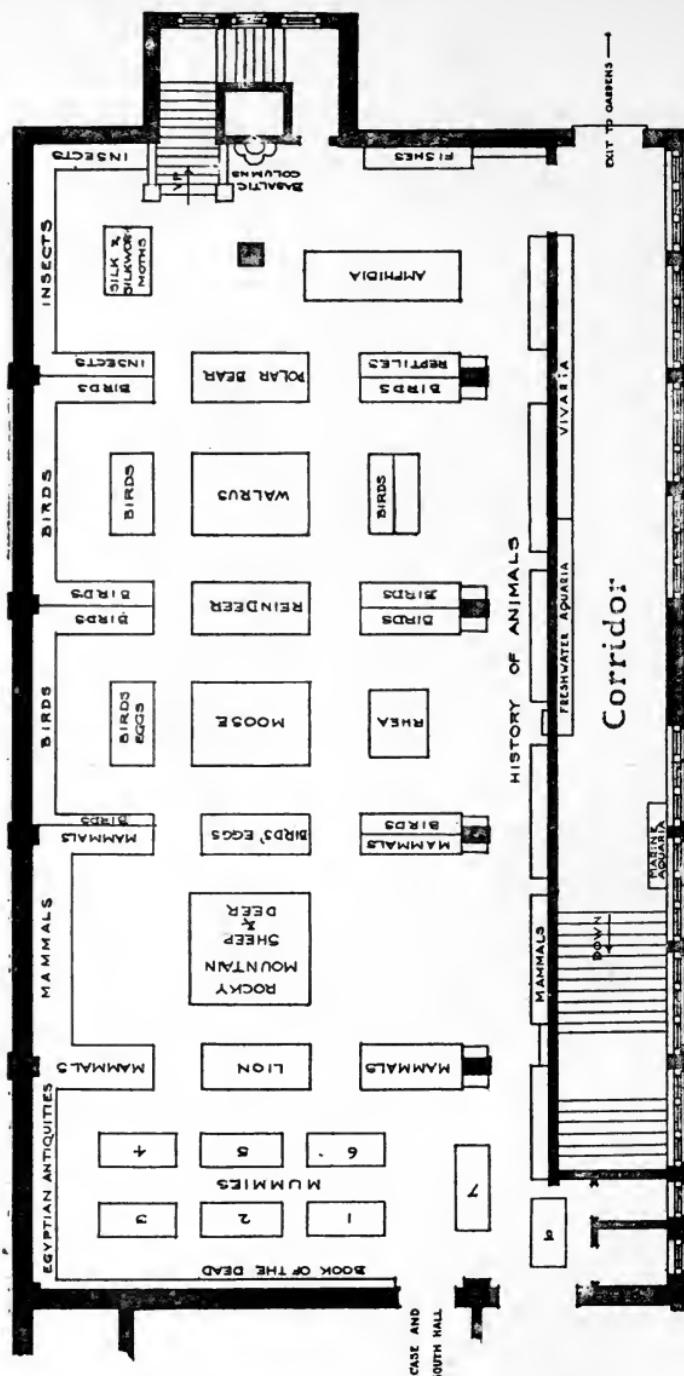
Sun-dried bricks, stamped with the cartouche of Rameses II. (B.C. 1330), and other objects.

A wooden funeral chest, with wooden stelæ (or ^{Case 3—4.} “tombstones”), boxes, figures, etc. A model boat with oarsmen.

Casts of hieroglyphics. A beaded square, taken ^{Case 5—6.} from a mummy. Wooden head-rests. Canopic jars, used to hold the viscera of the deceased. Alabaster pots and jars, one specimen bearing the name of Nessita-nub, XXIst Dynasty, a prophet of Amen Ra, the king of the gods. Amulets in porcelain, representing eyes, scarabs, rings, and other symbolic objects. Beads and bead-work. Funeral wreaths, etc., of the 1st century B.C. (Græco-Egyptian period), brought from Hawara by Professor Flinders Petrie. A specimen of sack-cloth. A hand-mill, such as were and still are used by Egyptian women.

On the wall, a series of specimens of Coptic embroideries, dating from the 4th to the 7th century A.D. Photographs of Egyptian objects.

In the corner a facsimile of a painting on the tomb of Seti I. (about B.C. 1366) in the Valley of the Kings at



Corridos

NORTH HALL.

Thebes, representing the soul of Seti I. being led into the presence of Osiris and Isis by Horus. By the doorway, two coloured casts of statues of Osiris and Isis. The originals, in the museum of Gizeh, are of the XXVIth Dynasty.

Mummies.—Mummy of a lady named Ansar-Bes, Centre-case A in a pain'ted cartonnage case. On the cover of the coffin is inscribed a prayer to Osiris, and this is surmounted by the figure of a Jackal. Date about the XXVIth Dynasty, B.C. 650.

Mummy of a lady with gilded face-mask and eyes of Centre-case B porcelain. The coffin is of sycamore, unpainted, and probably does not belong to the body. Date about the XIXth Dynasty, B.C. 1330. Found at Fayoum, Lower Egypt.

Mummy of a priestess named Peta-Amen-Neb-Nest- Centre-case C. taiu, the daughter of an officer of high rank at Thebes. Date about the XXVIth Dynasty, B.C. 500. This coffin is beautifully decorated with paintings of Nut, the sky goddess, with outstretched wings, and deities of the under-world, the judgment scene, etc.

Mummy of a lady, with coffin complete, brought from Centre-case D. Egypt by Professor Rossellini. It belongs to the end of the XXIst Dynasty, B.C. 1100.

Mummy case of Ur-Amen, a chief prophet of Amen- Centre-case E. Ra, from Deir-el-Bahari, presented by the Egypt Exploration Fund. It is of the XXIst Dynasty, about B.C. 1100. Note the inner lid and the crossed hands.

Mummy of a woman, in a cartonnage case, made of Centre-case F. stuccoed linen, painted and inscribed. Of the XXVIth Dynasty, about B.C. 650.

Mummy of a priestess of Amen-Ra at Thebes. Of Centre-case G. the XIXth Dynasty, about B.C. 1300. Above is the lid of the mummy-case of Nesi-Amsu, a priest, the son of Peta-Ast, XXVIth Dynasty, about B.C. 600. Found at Fayoum, Lower Egypt.

Mummy of a man, in a large unpainted case. The Centre-case L. coffin (as in the other specimens) is of sycamore wood. By the side of the mummy is a rod, said to have been found with it. Above is the mummy of an Egyptian priest which is without a case.

Case 6.

Mummy of a man, from Mallicollo, an island of the New Hebrides, in the West Pacific.

Mummy of an Ancient Peruvian woman.

NORTH HALL.

NATURAL HISTORY.

Animals are classified by zoologists into two main divisions, the PROTOZOA, or animals composed of a single cell, and METAZOA, or those which are built up of many cells. The latter division is further sub-divided into various groups: the PORIFERA, CŒLENTERATA, "VERMES," ECHINODERMATA, MOLLUSCA, ARTHROPODA, and CHORDATA. The "Vermes" do not constitute a natural group, and the Chordata include the Vertebrates as well as lowlier forms.

North wall.

A Survey of the Animal Kingdom, illustrated by drawings or actual specimens, is designed to indicate at a glance the relative position of one group of animals to another. The explanatory label on either side should be read.

East wall.

The History of Animals.—A series briefly illustrating the History of Animals, adapted from a similar series arranged by Mr. G. H. Carpenter, of the Science and Art Museum, Dublin. To be understood thoroughly the labels should be read in due order from the beginning.

The subjects dealt with are—Terms used in classification, Variation, Sexual Differences, Struggle for Existence, Natural Selection including Adaptation and Mimicry, Life History of Species and Races, and similar parts in Different Animals.

A separate handbook to this series can now be obtained.

METAZOA.—As far as possible, the specimens are arranged in a natural sequence, but the highest group of animals is the first approached.

Cases 9a—26.

MAMMALS.—Mammals are animals whose females suckle their young. They are divided into eleven orders.

Cases 9a—12.

I.—Primates.—Primates include Man, Apes, Monkeys and Lemurs. Man is represented by a skeleton, the

Apes by two skulls and casts of the hand and foot of the Gorilla, a model of the whole animal one-fifth natural size, and an Orang Utan. A Proboscis monkey, and various other species, represent the monkeys.

II.—**Chiroptera.**—Bats are easily distinguished by Case 13. the modification of their fore-limbs into true wings. Their fingers are much elongated and connected by a membrane to each other, and to the hind leg, and generally the tail is also included. An illustration shows how the breast-bone is strongly ridged for the attachment of the muscles used when flying.

Bats are divided into two groups:—(1) Fruit-eating bats, represented by the "Flying Fox" from Ceylon; (2) Insect-eating bats, represented by the British long-eared bat and the Common bat or "Flittermouse."

III.—**Insectivora.**—Insect-eating Mammals include Case 13. the common Hedgehog, Shrews and Moles, specimens of which are shown. Among other members of this group are the Tenrec and the Flying Colugo.

IV.—**Carnivora.**—Carnivorous or flesh-eating Mammals are primarily divided into two groups—(1) Fissipedia = land carnivores; (2) Pinnipedia = fin-footed carnivores, such as the Seal and Walrus.

1. **FISSIPIEDIA**—Land carnivores consist of many Cases 13—15. large families, of which the *Felidæ*, or cats, is the highest. They are represented by a Lion and the Centre-case A. head of a Tiger. The *Viverridæ*, or Civet-cats, in Cases 13. includes the Mongoose and its allies. The Mongoose is semi-domesticated in India, where it is most useful as a snake and vermin killer. The *Canidæ* consists of Dogs, Wolves and Foxes. The common and Canadian Foxes are shown. The *Mustelidæ* comprises three Cases 14—15. well-known groups—(1) The true Weasels with long bodies and short legs, including the Weasel, Stoat and Ermine; (2) the Badgers and Skunks; and (3) the Otters. The *Ursidæ*, or Bears, is the last important Case 14. family of the land carnivores. They are all much alike in form, varying chiefly in size. A Brown-bear and cub, the head and skull of a Grizzly-bear, the head of a Black-bear from the Rocky Mountains and a Polar, or Arctic, Bear with a captured Seal are exhibited. Centre-case F.

Case 16. 2. **Pinnipedia.**—The fin-footed carnivores include the Seals, Sea-lions (or Long-eared Seals) and the Walrus, all of which pass the greater part of their lives in the sea, feeding on fish, crabs, etc. A Leopard-seal, two young Seals and a Walrus (easily distinguished from the Seals and Sea-lions by the large tusks) are shown.

Centre-case E.

Case 17. V.—**Rodentia.**—The Rodents, or gnawing Mammals, are all vegetable feeders. They have no canine teeth, and, as a rule, only two pairs of incisor or front-cutting teeth; the incisor teeth throughout life continue to grow from the roots as quickly as they are worn down at the ends. The Squirrel, Rat, Mouse, Beaver, Porcupine and Rabbit belong to this order.

Cases 18—24. VI.—**Ungulata.**—The Ungulates, or hooved Mammals, include the Elephant, Rhinoceros, Horse, Hippopotamus, Pig, Camel, Deer, Sheep and Ox. They are represented by a portion of the tusk of the extinct Mammoth, teeth, foot and tail of the Indian Elephant, horn of a Rhinoceros, skulls and tusks of the Hippopotamus, Wild Boar, Wart Hog and Babirusa (in the latter the upward growth of the tusks may be seen penetrating the top of the skull); the heads and antlers of various species of Deer and Antelope, a group of Virginian Deer, Mule Deer, Rocky Mountains Sheep and Rocky Mountains Goat, a Moose, two Reindeer (all these from Canada). Heads of Giraffe, Musk Ox, and American Bison.

Centre-case B.

Centre-cases C and D.

Case 22.

Case 23. VII.—**Sirenia.**—Sirenia, or Sea-Cows, are aquatic animals, feeding on the water weeds growing in the rivers and shallow waters on the sea coasts of the Indian Ocean and South Atlantic. The only living Sea-Cows are the Manatee and Dugong. A skull and teeth of the Dugong are shown, and an idea may be gained of the appearance of the animals from a small print.

Case 25. VIII.—**Cetacea.**—Cetaceans include all Whales, Dolphins and Porpoises, and are represented by the teeth and ear-bones of the Sperm-whale, the lower jaw-bones and some vertebræ of the same animal fixed to

the outside of the north wall of the Museum, a tusk of the Narwhal, and skulls and a tail of Porpoises.

IX.—Edentata.—Edentates have an incomplete set of Cases 25a and 27. teeth (in some cases none at all), and include the Sloths, Anteaters, and Armadillos. The Nine-banded Armadillo and the thick plated skin of the Nataco, a smaller three-banded Armadillo from South America, are shown.

Fossil plates of an extinct South American species are also shown, which, if compared with the Nataco, indicate the great size of the former animal.

X.—Marsupalia.—Marsupials differ from all other Cases 27 and 28. Mammals in many important characters, one being the possession by most females of a pouch on the lower part of their bodies. The young are born in an immature state and placed in the pouch, where they are suckled by the parent. Later, the young continue to use the pouch as a place of refuge until no longer in need of protection. Marsupials are found only in Australia, with the exception of two families (True Opossums and Selvas) in America, and their best known examples are the Kangaroos, Wombats and Opossums.

The Kangaroos are represented by the Black-striped Wallaby. Other groups include the Flying Phalanger, the Koala, commonly called the "native bear," a harmless little mammal living in the gum trees, the leaves of which form its chief food.

XI.—Monotremata.—Monotremes form the lowest Case 28. order of Mammals, which comprises two families only—the Duck-bills, or Duck-moles, and the Spiny Anteaters; they both lay eggs, but only the Duck-moles have a marsupial pouch, which is, moreover, very small. Specimens of the Duck-mole are shown. Their webbed feet and flattened tail show them to be aquatic mammals. They feed on water animals, poking about for them in the mud with their duck-like mandibles.

BIRDS.—In classification Birds are primarily divided Cases 31a—70a. into two great divisions—I. Ratitæ or running Birds Table-cases 1—2. with keelless breastbones; II. Carinatae or flying Birds Centre-cases G, H, I. with keeled breastbones.

Case 31a. In Case 31a are, side by side, a breastbone of an Emu—a running bird, and of a common Duck—a flying bird. A flying bird must necessarily have a breastbone with a keel for the attachment of the great muscles of flight.

Cases 31a and 32. I.—**Ratitæ.**—Ratites, or Running-birds, include the various species of Ostrich, Rhea, Emu, Cassowary and Apteryx. The following examples are shown—Darwin's Rhea (South America), the skull and eggs of the Emu (Australia), eggs of the Ostrich and Cassowary, a cast of an egg of the great extinct *Æepyornis* (at one time living in Madagascar). The *Æepyornis* was probably the origin of the legends of the "Roc" read of in the "Arabian Nights," although it was not capable of flight. Two specimens of the Kiwi, or Apteryx, and a mounted skeleton of the bird, in which the much-reduced wing-bones and flat breast-bone should be marked. The Kiwis are only found in New Zealand.

Centre-case G. Case 31a.

Cases 32—70a. II.—**Carinatæ.**—Carinates, or flying birds, include all the other birds, and are divided into many distinct groups. They are arranged as far as possible in their natural order.

Case 32. **Game-birds** are represented by specimens of Black Cock, Grouse, Capercaillie, Pheasants, Partridges, and Peafowl.

Cases 32—39. **Pigeons and Doves** are represented by a few specimens; a print is shown from an old picture of the extinct Dodo, the gigantic pigeon of Mauritius.

Case 40. **Rails and Coots** are represented by the Land-rail or Corncrake, Little Crake, Water-rail, Water-hens, Jacana and Coots. The length of the toes of the Jacana is interesting, their great spread enabling the bird to walk on the floating leaves of water plants when in search of food. The toes of the Coot are curiously lobed, and should be compared with those of the Grebes.

Case 41. **Grebes** are found in almost all parts of the world, although there are not many species. The Dabchick is one of the smallest species and the Crested Grebe the largest; both of these frequent many of the inland lakes and broads of England.

Divers—Out of the five species known, three are exhibited. Divers are found only in the Northern Hemisphere; their power of swimming, diving and flying is great, but on land they can only proceed in a clumsy, shuffling manner.

Penguins are found only in the Southern Hemisphere. They are even more modified than the Divers for life in the water. The wings are converted into paddles, and the feathers are scaly. Where met with, these birds are found in crowds. The largest species is the King Penguin, one of which is shown.

Petrels are sea birds with great powers of flight, and may be easily distinguished from the gulls by their tubular nostrils. The Albatross is the largest of the Petrels; the Wandering and the Sooty Albatross are exhibited, both of which occur only in the Southern Seas. Other Petrels shown are the so-called Cape Pigeons.

Auks are inhabitants of the Northern Seas. They are all good divers. The recently-extinct Great Auk is represented by a photograph of the bird and egg half natural size. Other birds shown in this group are the Razor-bill, Guillemot and Puffin, all of which occur on the British coasts.

Gulls comprise the true Gulls and the Skuas. There are many species of both. The Gulls are represented by the common British Gulls and Terns, or "Sea-swallows"; the Skuas by Richardson's Skua.

Plovers and Bustards are nearly related to the gulls, although the feet of the former are not webbed. The group includes the Plovers, Phalaropes, Snipe, Wood-cocks, Curlews, Ruffs, Stilts, Oyster-catchers, Turnstones, Coursers and Bustards, each of which is represented.

Herons and Bitterns are wading birds, feeding on frogs, fish, and other animals. They are represented by a Squacco Heron, Little Green Heron, Large Egret, two Night Herons, a Bittern and the Glossy and the Scarlet Ibis.

Swans, Geese and Ducks are easily recognised by their flattish bills, short stout legs and webbed feet.

The Canadian Geese and the Pigmy Goose from Australia are shown. Ducks represented by the Eider, Scoter, Longtailed and Harlequin, which may be called Sea-ducks; and the Sheld-ducks, Mallard, Wigeon, Teal, Pintail, Shoveller, more common in inland waters.

Case 58. **Mergansers** are distinguished by their bill, which, being deeply serrated, gives the appearance of teeth. The Smew, Goosander and Red-breasted Merganser are exhibited.

Case 59. **Pelicans** are distinguished by having all four toes connected by a web. Besides the Pelican, Gannet, Cormorant, Shag and Darter exhibited, the group includes the Tropic- and Frigate-birds. The Cormorant and Shag are common on the British coasts, and the Gannet is exceedingly abundant on the Bass Rock off the Firth of Forth.

Cases 60—62 **Birds of Prey** comprise Secretary-birds, Vultures, Hawks, Eagles and Owls. Among the species shown are the Peregrine Falcon, Merlin, Golden Eagle, White-tailed Eagle, Eagle Owl, and Snowy Owl.

Cases 63—65. **Parrots** are all readily distinguished. They have a cere, or face, of bare skin, and the toes directed two in front and two behind, and, unlike any other birds, the upper mandible, or beak, is movable and hinged to the skull. They make their nests in holes, and lay white eggs. Many species of Lories, Parakeets, Cockatoos, and Parrots are shown. The Kea Parrot of New Zealand is semi-nocturnal in habits and naturally feeds on grubs, insects, seeds, etc.; in many districts, however, it now feeds only on flesh, which it obtains from the refuse of the slaughter-houses, or on the kidney fat of sheep killed by the combined attack of several of the birds.

Case 66. **Picarian-birds** are various in appearance, but all are alike in having the two outer front toes more or less united. The Picarian birds shown comprise Rollers, Kingfishers (including the "Laughing Jackass" of Australia, which, however, feeds chiefly on reptiles, insects, etc., and does not especially frequent water), Hoopoes, Bee-eaters, Mot-mots, Nightjars, Swifts and Humming-birds. Other Picarian birds are Oil-birds, Frog-mouths, Hornbills, Todies.

Trogons are noted for their bright plumage. They are found in Africa, Southern India, and more abundantly in Central and South America. Many species are shown, including the Resplendent Tropic of Central America.

Cuckoos include many species and forms, and are not all parasitic in habit like our Cuckoo.

Climbing birds are the Toucans, Barbets and Honey Guides. The Toucans are distinguished by their large bills, which, although so large, are extremely light, as the bones are full of air spaces. They are natives of tropical America, and feed chiefly on soft fruits. Species of Toucan and Barbet are shown.

Woodpeckers, like the previous group, have the toes arranged two in front and two behind. The tail-feathers are stiff, and so form a good support when applied to the stem of the tree on which the bird is clinging. The bill is generally strongly made and pick-shaped, but some of the ground feeding species have weak and curved bills. The tongue of the woodpeckers is well adapted for securing their food of grubs and insects from holes in trees; it is extremely long, curling right over the skull when withdrawn; the tip is hardened, pointed, and barbed.

The British species are shown together with the Great Brazilian Woodpecker and some North American species.

Jacamars have feet like the Woodpeckers, but in habits of feeding resemble the Fly-catchers—perching in open situations to watch for passing insects, after they have caught their prey they return to their former perch. They are natives of Brazil.

Perching Birds form the last and largest group, and include the Crows, Birds-of-Paradise, Bower-birds, Starlings, Orioles, Weaver-birds, Tanagers, Finches, Buntings, Larks, Wagtails, Creepers, Sun-birds, Tits, Shrikes, Waxwings, Thrushes, Dippers, Manakins, Pittas, and many others. Nearly all of these are represented.

Birds'-Eggs.—The birds'-eggs are arranged so as to form an introduction to their study under the following

Cases 68-70a,
centre-case II
and I.

heads—1. Varied colouring of eggs. 2. Protective colouring of eggs. 3. Clutches. 4. Size of egg in comparison with that of the bird. 5. Form of eggs. 6. Grain of the egg-shell. The labels should be read consecutively from the beginning to be understood properly.

Where possible an egg of the larger British birds is placed by the side of the mounted specimen. The smaller eggs, and eggs of which no mounted specimen is in the collection, will be found in the table-case. (After inspection, please replace the covers.)

A reference collection of British birds'-eggs is, for convenience, placed in the Students' Insect Room, to which access may be had by applying to the attendant.

Cases 76b-79.

REPTILES—Reptiles may be described as scaly-skinned, cold-blooded, egg-laying animals, the young of which never breathe by gills.

Crocodiles are represented by three specimens, and two heads of the Gavial from the Ganges.

Tortoises and Turtles are represented by the shells of various species, the head of a turtle from Ascension Island, and fossil remains of Tortoises and Turtles from the London Clay at Sheppen.

Case 78.

Lizards.—The little Flying-lizard is interesting. The parachute-like expansion of skin is supported on the elongated ribs, and this membrane can be closed at will like a fan. The Chameleons, popularly known from their power of changing colour, are also interesting in other ways, as for example the peculiar form of their feet, and their prehensile tail; the end of their extremely long tongue is knob-like and sticky, and by its means flies are caught; their eyes have the power of independent movement, which enables them to look in two directions at once. The Slow Worm is closely related to Lizards; although externally it has no limbs, yet traces of these are present in the skeleton.

On the eastern wall of the North Corridor will be seen specimens of the marine fossil reptiles, *Ichthyosaurus* and *Plesiosaurus*.

Case 79.

Snakes are represented by stretched skins of the Python, Rattlesnake and Cobra; rattles of the Rattle-snake; the Ring or Grass Snake (a perfect cast skin,

35 inches long, of the Grass Snake, cast by the specimen among the living exhibits; it is, of course, completely inside out; the scales from the eyes should be noticed); the Viper, and some plaster models of Indian Sea-Snakes.

AMPHIBIANS.—Amphibians have a soft, naked, Table-ease 4. clammy skin. They begin life as tadpoles, which usually live entirely in the water, and breathe by gills until reaching their parental form; they then gradually leave the water and breathe by lungs.

Tailed amphibians, as Newts and Salamanders, and tailless amphibians (tailed in their young tadpole form), Frogs and Toads, are shown, together with a series of tadpoles, showing the successive stages of development.

FISH.—Fish are primarily divided into four large Cases 91 -93. groups:—

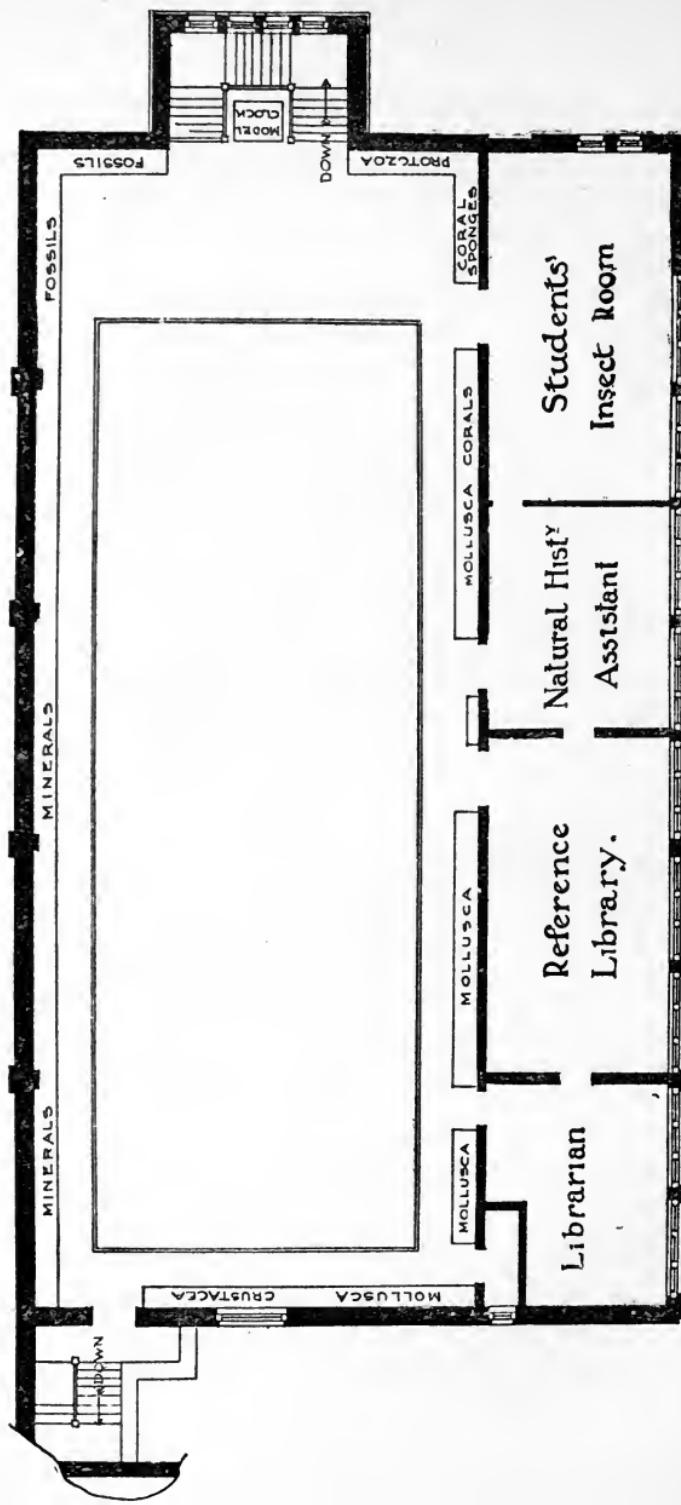
I.—**Cartilaginous Fish**, in which there are no true bones, include Sharks, the Skate, Ray, and Saw-fish. A small Shark, the jaws of larger species, and large saws of the Saw-fish are shown. A small Saw-fish gives by comparison an idea of the enormous size of the possessors of larger saws like those exhibited.

II.—**Enamel-scaled Fish** include the Sturgeon. Not represented.

III.—**Bony Fish** include the great majority of salt and fresh water fish. Represented by the Pipe-fish, Sea-horse, Parrot-fish, Flying-fish, Remora, Pike and Bream.

IV.—**Lung-breathing Fish or Mud-fish**, represented Table-ease 4. by casts of the African Mud-fish.

The remaining groups of animals are not yet allotted their proper places, but will eventually occupy the whole of the Gallery, beginning at the east side with the Protozoa or simplest animals, and leading round to the Insects on the north side. They will, as far as possible, be arranged according to the "Students' Text Book of Zoology," by Adam Sedgwick (which is in the Library).



GALLERY OF NORTH HALL.

ARTHROPODA. Insecta.—The following groups of Cases 80—90. insects are represented by selected specimens which are temporarily exhibited in the last bay of the North Hall—Locusts and Grasshoppers, Stick and Leaf Insects, Plant and Water Bugs, Cicadas and Lantern-flies, Beetles, Butterflies and Moths. In the table-case Table-case 3. are specimens of the Tusseh silk moths and of Tusseh silk in all stages from the cocoon to the woven material.

The Student's Insect Room contains, for purposes of Gallery.
East side. reference and identification of specimens, cabinets of Coleoptera (chiefly exotic), Macro-lepidoptera, and a separate collection of British species. For convenience, a cabinet of British birds' eggs is also placed here. These collections may be used at all times when the Museum is open by anyone studying or especially interested, on application to the attendant.

The **Crustacea** include Crabs, Lobsters, Shrimps, South side. Barnacles, Woodlice, Water-fleas, and other forms.

MOLLUSCA; **ECHINODERMATA**; **VERMES**; **CŒLENTERATA**, East side. including Corals, Sea-anemones, Sea-fans, Jelly-fish and Hydroids; and **PORIFERA** or Sponges.

PROTOZOA, represented by enlarged drawings and North side. models.

LIVING ANIMALS.

Vivaria and Aquaria.—The animals shown are, with North Corridor. very few exceptions, British species, and nearly all the land and fresh water specimens were obtained in the neighbourhood of the Museum. Above the Marine Aquaria coloured drawings of the species in the tanks are given as aids in identification.

A separate handbook to these exhibits has been prepared.

PALÆONTOLOGY.

Fossil remains of animals are being accumulated but they are, for the most part, placed in position beside recent forms.

MINERALOGY.

The collection of minerals is in course of arrangement in the order of J. D. Dana's "System of Mineralogy" (in the Library), beginning with the Carbons and ending with the Clays. Galler y.
West side.

LIBRARY.

North Gallery,
east side.

The Library is designed to extend the educational influences of the Museum by providing the means of ready access to some of the best of the literature of those branches of science which are represented in the collections. It may be used at all times during which the Museum is open to the public, without ticket of admission or other form of special permission.

A Subject Catalogue on the card principle is provided. In the Index to this, the names of the subjects represented by the books in the Library are arranged in alphabetical order.

The main divisions of the Library are the following—

Dictionaries, Encyclopaedias, Bibliographies, and similar works of reference.

Physics and Chemistry.

Mineralogy.

Geology and Physical Geography.

Travel and Exploration.

General Biology.

Botany.

Zoology—General Zoology and the

Zoology of the Invertebrates.

Zoology of the Vertebrates.

Anthropology (including Archaeology).

Theology, Economics, Political History, Law, Medicine, Surgery, and the applications of science to the purposes of Technical Industry are not represented in the Library.

To obtain books, a ticket (to be found in a tray on the desk) must be filled up for each work required and signed by the applicant with address and the date. The author's name and a short title of the work are to be given, and the figure and first letter of the registration-formula used as a press mark. The ticket is then to be handed to the Librarian, or official in charge of the Library for the time being, *to whom books must be returned after use. Until this is done the person to whom any book has been issued is held responsible for it, and no book, under any circumstances, is to be taken from the Reading Room.*

REFRESHMENT ROOM.

Tea and light refreshments may be obtained in South Gallery, in accordance with an authorised tariff placed in the room.

THE GARDENS.

Adjoining the Museum are the **Horniman Gardens**, access to which from the Museum is obtained by the door at the end of the north corridor. (Entrance from the Gardens to the Museum by this door is not permitted.)

The gardens are nine acres in extent, which area is, at the date of this guide, being increased by the inclusion of a piece of ground to the south-west, about an acre and a half in extent. In the maintenance of these grounds due regard is had to their possibilities as an adjunct of the Museum. In a prominent position on the highest ground in the gardens stands the house known as "Surrey Mount," a portion of which will probably in the near future be adapted for use as a museum, to contain objects illustrating the history and topography of the County of London; and a scheme is in course of preparation for the laying out of certain plots of ground for the use of students as an aid to Nature-study.

G. L. GOMME,

Clerk of the Council.

A. C. HADDON,

Advisory Curator.







Manufacturers
Syracuse, N. Y.
Stockton, Calif.

YB 23653

M186285

THE UNIVERSITY OF CALIFORNIA LIBRARY

